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APPLICATION NO. 09/054,263	FILING DATE 06/03/99	FIRST NAMED INVENTOR TWISS	ATTORNEY DOCKET NO. 100745
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PM51/0224

EXAMINER JOHNSON, C.
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ART UNIT 3641	PAPER NUMBER 12
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DATE MAILED:

02/24/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No.  
**09/084,263**

Applicant(s)  
**Edwin S. Twigg**

Examiner  
**Stephen M. Johnson**

Group Art Unit  
**3641**



☒ Responsive to communication(s) filed on Jun 3, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire six month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

☒ Claim(s) 1-22 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-22 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on Jun 3, 1998 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is/are ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 8, 11

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

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1. The drawings are objected to because figs. 1 and 2 should be labeled as prior art.

Correction is required.

2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect can be deferred until the application is allowed by the examiner.

3. The disclosure is objected to because of the following informalities: The disclosure is replete with misspellings of terms such as "fibre", "fibres", "minimise", and "metres" to list some examples.

Appropriate correction is required.

4. The disclosure is objected to because of the following informalities: The serial number and filing date of the provisional U.S. application have not been given.

Appropriate correction is required.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 3-4 and 15-16 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for specified metals and fibers, does not reasonably provide enablement for any suitable metal, other suitable fibers, or any alloy and intermetallic capable of being bonded. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope

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with these claims. While the application is enabling for the specified metals and fibers (eg. Titanium metal; silicon carbide fibers); it is not enabling for any suitable and unspecified metal or any other suitable and unspecified fiber.

7. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Throughout the claims, the words "fibre", "fibres", "metres", and minimised" and misspelled. In claims 3 and 15, use of the phrase "any suitable metal" makes the claim language indefinite as to what metals are or are not intended to be included in this terminology. Use of the terms "alloy and inter metallic which is capable of being bonded" and "other suitable fibers" in claims 3, 4, 15, and 16, are indefinite for like reasons.

In claim 9, lines 7-8, how does the phrase "an upstream rotor disc and a downstream rotor disc" make the claim language indefinite as to how these disc are intended to be related to the previously claimed "plurality of axially spaced rotor discs". In claim 10, line 1-2, it is not understood as to how casing 154 can be considered to be a part of stator 162. In claims 10 and 11, the claim language "the at least one annular spacer being fibre reinforced ... between the rotor and the stator" has been previously already claimed in claim 9 from which they depend.

In claim 4, line 3; and in claim 16, line 2; use of the term "comprising" is inappropriate in a Markush grouping. The phrase "consisting of" could be used in its place.

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8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-7 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Rossman.

Rossman discloses a fiber reinforced metal rotor comprising:

- a) a hub, rim, and extending member, 2, 4, 5, 5a
- b) at least two ring of fibers, and 2, 4
- c) at least one rotor blade. 3

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rossman.

Rossman applies as previously recited. However undisclosed is an outer radius of .5 meters. It would have been an obvious matter of designs choice to modify the outer radius of the Rossman rotor to the specified radius since there is nothing in the disclosure that states any advantage obtained nor any stated problem solved by the particular outer radius claimed (In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975)).

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12. Claims 1-7 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagle (667).

Wagle (667) discloses a fiber reinforced metal rotor comprising.

- a) a hub, rim, and extending member, 24, 29, 30
- b) at least two rings of fibers, 29, 30
- c) at least one rotor blade. 18

13. Claims 9-21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ress Jr., Stedfeld, Wagle (777), Bouiller et al., Wagle (668), Albring et al., Baudier et al., Esser et al., and Schmidt-Eisenlohr disclose other state of the art fiber reinforced metal rotors.

15. Any inquiry concerning this communication should be directed to Stephen M. Johnson at telephone number (703) 306-4158.

*TMh*  
**STEPHEN M. JOHNSON**  
**PRIMARY EXAMINER**

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